Applicant: ZHI et al. Serial No.: 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US Response to Notice of Non-Compliant Amendment

AMENDMENTS TO THE CLAIMS:

Please amend claims 25, 26, 29 and 45 as indicated below, and cancel claims 27 and 28 without prejudice or disclaimer. This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Previously presented) A compound having the formula:

wherein:

R¹ is hydrogen, F, Cl, or C₁-C₃ aliphatic;

R² is hydrogen, F, Cl, Br, C₁-C₄ aliphatic, C₁-C₄ haloaliphatic or C₁-C₄ heteroaliphatic;

 R^3 is C_1 - C_4 aliphatic, C_1 - C_4 haloaliphatic, C_1 - C_4 heteroaliphatic, optionally substituted aryl or heteroaryl;

 R^4 is hydrogen, C_1 - C_4 aliphatic, C_1 - C_4 haloaliphatic, C_1 - C_4 heteroaliphatic, optionally substituted aryl or heteroaryl;

 R^5 and R^6 each independently is hydrogen, F, Cl, OR^{10} , C_1 - C_4 aliphatic, C_1 - C_4 haloaliphatic or C_1 - C_4 heteroaliphatic;

 R^7 and R^8 each independently is hydrogen, F, Cl, C_1 - C_4 aliphatic, C_1 - C_4 haloaliphatic or C_1 - C_4 heteroaliphatic; or

R⁷ and R⁸ taken together form a carbonyl group;

 R^9 is halogen, OR^{10} , SR^{10} , $NR^{10}R^{11}$, C_1 - C_4 haloaliphatic, C_1 - C_4 heteroaliphatic; C_1 - C_4 heterohaloaliphatic;

 R^{10} and R^{11} each independently is hydrogen, C_1 - C_4 aliphatic, phenyl, and or benzyl; and n = 0 or 1.

2. (Previously presented) The compound of claim 1, wherein:

R¹ is hydrogen, F or Cl;

R² is F, Cl, Br, C₁-C₄ alkyl or C₁-C₄ haloalkyl;

 R^3 is C_1 - C_4 alkyl, C_1 - C_4 haloalkyl or optionally substituted aryl;

Applicant: ZHI et al. Serial No.: 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US Response to Notice of Non-Compliant Amendment

R⁴ is C₁-C₄ alkyl, C₁-C₄ haloalkyl or optionally substituted aryl;

 \mbox{R}^{5} and \mbox{R}^{6} each independently is hydrogen, F, Cl, $\mbox{OR}^{10},$ $\mbox{C}_{1}\mbox{-}\mbox{C}_{4}$ alkyl or $\mbox{C}_{1}\mbox{-}\mbox{C}_{4}$ haloalkyl;

 R^7 and R^8 each independently is hydrogen, F, Cl, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl;

R⁹ is halogen, OR¹⁰, C₁-C₄ haloalkyl, C₁-C₄ heteroalkyl or C₁-C₄ heterohaloalkyl;

R¹⁰ is hydrogen; and

n = 0 or 1.

3. (Previously presented) The compound of claim 1, wherein:

R¹ is hydrogen;

R² is Cl, Br, CH₃, C₂H₅, CF₃, C₂F₅ or CF₂Cl;

 R^3 is C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 heteroalkyl or optionally substituted aryl;

 R^4 is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 heteroalkyl or optionally substituted aryl;

 R^5 and R^6 each independently is hydrogen, F, Cl, OR^{10} , C_1 - C_4 alkyl, C_1 - C_4 haloalkyl or C_1 - C_4 heteroalkyl;

R⁷ and R⁸ each independently is hydrogen, F, Cl, C₁-C₄ alkyl, C₁-C₄ haloalkyl or C₁-C₄ heteroalkyl;

R⁹ is halogen, OR¹⁰, C₁-C₄ haloalkyl, C₁-C₄ heteroalkyl or C₁-C₄ heterohaloalkyl;

R¹⁰ is hydrogen or C₁-C₄ alkyl; and

n = 0 or 1.

4. (Previously presented) The compound of claim 1, wherein:

R¹ is hydrogen, F, Cl, or C₁-C₃ alkyl;

R² is hydrogen, F, Cl, Br, C₁-C₄ alkyl, C₁-C₄ haloalkyl or C₁- C₄ heteroalkyl;

 R^3 is C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 heteroalkyl, optionally substituted aryl or heteroaryl;

R⁴ is hydrogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ heteroalkyl, optionally substituted aryl or heteroaryl;

R⁵ and R⁶ each is hydrogen;

R⁷ and R⁸ each independently is hydrogen, C₁-C₄ alkyl or C₁-C₄ haloalkyl;

R⁹ is OR¹⁰;

R¹⁰ is hydrogen or C₁-C₄ alkyl; and

n=0.

Applicant: ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US Serial No.: 10/566,569 Response to Notice of Non-Compliant Amendment

Filed: August 21, 2006

5. (Previously presented) The compound of claim 4, wherein:

R¹ is hydrogen;

 R^2 is Cl, CH₃, C₂H₅, CH₂F, CHF₂, CF₃, C₂F₅ or CF₂Cl;

 R^3 is C_1 - C_4 alkyl;

 R^4 is hydrogen or C_1 - C_4 alkyl;

R⁷ and R⁸ each independently is hydrogen, CH₃, C₂H₅, CF₃, C₂F₅ or CF₂Cl; and R⁹ is OH.

6. (Previously presented) The compound of claim 5, wherein:

R² is Cl, CH₂F, CHF₂, CF₃, C₂F₅ or CF₂Cl;

 R^3 is C_1 - C_2 alkyl;

R⁴ is hydrogen or C₁-C₂ alkyl; and

R⁷ and R⁸ each independently is hydrogen, CH₃, CF₃, C₂F₅ or CF₂Cl.

7. (Previously presented) The compound of claim 6, wherein:

R² is Cl, CH₂F, CHF₂, CF₃ or CF₂Cl;

 R^3 is CH_3 ;

R⁴ is hydrogen or CH₃; and

R⁷ and R⁸ each independently is hydrogen, CH₃, CF₃ or CF₂Cl.

8. (Previously presented) The compound of claim 7, wherein:

R² is Cl, CH₂F, CHF₂, or CF₃;

R³ is CH₃;

R⁴ is hydrogen or CH₃; and

R⁷ and R⁸ each independently is hydrogen, CH₃ or CF₃.

- 9. (Previously presented) The compound of claim 1, wherein the compound is an androgen receptor modulator.
- 10. (Previously presented) The compound of claim 1, wherein the compound is an androgen receptor antagonist.
- 11. (Previously presented) The compound of claim 1, wherein the compound is an androgen receptor agonist.
- 12. (Previously presented) The compound of claim 1, wherein the compound is an androgen receptor partial agonist.

Applicant: ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US
Serial No.: 10/566,569
Response to Notice of Non-Compliant Amendment
Filed: August 21, 2006

13. (Previously presented) The compound of claim 1, wherein the compound is:

6-(2(*R*)-Hydroxymethyl-5(*S*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **106**);

6-(2(R)-Fluoromethyl-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 107);

6-(2(R)-Fluoromethyl-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 108);

6-(2(*R*)-Difluoromethyl-5(*R*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **109**);

6-(2(R)-Fluoromethyl-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 110);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**111**);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**112**);

6-(2(R)-(l(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**113**);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**114**);

6-(2(R)-(2,2,2-Trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 115);

4-Chloro-6-(2(R)-(1(S)-hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-2(1H)-quinolinone (Compound **128**);

4-Chloro-6-(2(R)-(l(R)-hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-2(1H)-quinolinone (Compound **129**);

6-(2(R)-(1(R)-Hydroxy-1-methyl-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**132**);

6-(2(R)-(1(S)-Hydroxy-1-methyl-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**133**);

6-(2(*R*)-(1-Hydroxy-1-trifluoromethyl-2,2,2-trifluoroethyl)-5(*R*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **134**);

Applicant : ZHI *et al*.

Serial No. : 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US Response to Notice of Non-Compliant Amendment

- 6-(2(*R*)-Chloromethyl-5-(*R*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **140**);
- 6-(2(*R*)-Chloromethyl-5-(*S*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **141**);
- 6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**142**);
- 6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**143**);
- 6-(2(R)-(l(S)-Hydroxy-2,2,2-trifluoroethyl)-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**144**);
- 6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**145**);
- 6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**146**);
- 6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**147**);
- 6-(2(R)-(1(R)-Hydroxybenzyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 150);
- 6-(2(R)-(1(S)-Hydroxybenzyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 151);
- 6-(2(R)-(1(R)-Hydroxybenzyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**152**);
- 6-(2(R)-((2-1,3-Dithianyl)-1(R)-hydroxymethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**153**);
- 6-(2(R)-((2-1,3-Dithianyl)-1(S)-hydroxymethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**154**);
- 6-(2(*R*)-Difluoromethyl-5,5-dimethyl-l-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **155**);
- 6-(2(*R*)-Fluoromethyl-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **156**);
- 6-(2(*R*)-Hydroxymethyl-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **157**);

Applicant : ZHI *et al*.

Serial No. : 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US Response to Notice of Non-Compliant Amendment

6-(2(R)-(1(R)-Hydroxyethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**164**);

6-(2(R)-(1-Hydroxy-1-methylethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound **165**);

6-(2(R)-(1(S)-Hydroxy-1-cyclopropylmethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**166**);

6-(2(R)-(1(R)-Hydroxy-1-cyclopropylmethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**167**);

6-(2(R)-(1(S)-Hydroxypropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 168),

6-(2(R)-(1(R)-Hydroxypropyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**169**);

6-(2(R)-(1(R)-Hydroxypropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 170);

6-(2(R)-(1(S)-Hydroxypropyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**171**);

6-(2(R)-(1(R)-Hydroxy-2-methylpropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound **172**);

6-(2(R)-Acetyloxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 177);

6-(2(R)-Hydroxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 179);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**180**);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-chlorodifluoromethyl-2(1<math>H)-quinolinone (Compound **181**);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-chlorodifluoromethyl-2(1*H*)-quinolinone (Compound**182**);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-methyl-1-pyrrolidinyl)-4-chlorodifluoromethyl-2(1*H*)-quinolinone (Compound**183**);

6-(2(R)-Acetyloxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 186);

Applicant : ZHI et al. Serial No. : 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US Response to Notice of Non-Compliant Amendment

6-(2(R)-(2-Hydroxyethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**187**);

- 6-(2(R)-(2-Hydroxyethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 188); or
- 6-(2(R)-Acetyloxyethyl-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound **189**).
- 14. (Previously presented) A pharmaceutical composition, comprising a pharmaceutically acceptable carrier and compound of claim 1.
- 15. (Previously presented) A pharmaceutical composition, comprising a pharmaceutically acceptable carrier and a compound of claim 2.
- 16. (Previously presented) A pharmaceutical composition. comprising a pharmaceutically acceptable carrier and a compound of claim 7.
- 17. (Previously presented) A pharmaceutical composition, comprising a pharmaceutically acceptable carrier and a compound of claim 8.
- 18. (Previously presented) The pharmaceutical composition of claim 14, wherein the compound is an androgen receptor modulator.
- 19. (Previously presented) The pharmaceutical composition of claim 18, wherein the compound is an androgen receptor antagonist.
- 20. (Previously presented) The pharmaceutical composition of claim 18, wherein the compound is an androgen receptor agonist.
- 21. (Previously presented) The pharmaceutical composition of claim 18, wherein the compound is an androgen receptor partial agonist.
- 22. (Previously presented) The pharmaceutical composition of claim 14, wherein the compound is:
- 6-(2(*R*)-Hydroxymethyl-5(*S*)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **106**);
- 6-(2(R)-Fluoromethyl-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 107);
- 6-(2(R)-Fluoromethyl-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**108**);

Applicant : ZHI *et al*.

Serial No. : 10/566,569

Filed : August 21, 2006

Attorney's Docket No.: 3800024.00350 / 1111US
Response to Notice of Non-Compliant Amendment

6-(2(*R*)-Difluoromethyl-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **109**);

6-(2(R)-Fluoromethyl-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 110);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound 111);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**112**);

6-(2(R)-(l(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**113**);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**114**);

6-(2(R)-(2,2,2-Trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 115);

4-Chloro-6-(2(*R*)-(1(*S*)-hydroxy-2,2,2-trifluoroethyl)-5(*R*)-methyl-1-pyrrolidinyl)-2(1*H*)-quinolinone (Compound **128**);

4-Chloro-6-(2(R)-(l(R)-hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-2(1H)-quinolinone (Compound **129**);

6-(2(R)-(1(R)-Hydroxy-1-methyl-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**132**);

6-(2(R)-(1(S)-Hydroxy-1-methyl-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**133**);

6-(2(R)-(1-Hydroxy-1-trifluoromethyl-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**134**);

6-(2(R)-Chloromethyl-5-(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound **140**);

6-(2(R)-Chloromethyl-5-(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 141);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound 142);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(S)-phenyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**143**);

Applicant: ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US Serial No.: 10/566,569 Response to Notice of Non-Compliant Amendment

Filed : August 21, 2006

6-(2(R)-(l(S)-Hydroxy-2,2,2-trifluoroethyl)-5,5-dimethyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 144);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5,5-dimethyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 145);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-phenyl-1-pyrrolidinyl)-4trifluoromethyl-2(1*H*)-quinolinone (Compound 146);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-phenyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 147);

6-(2(R)-(1(R)-Hydroxybenzyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 150);

6-(2(R)-(1(S)-Hydroxybenzyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 151);

6-(2(R)-(1(R)-Hydroxybenzyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 152);

6-(2(R)-((2-1,3-Dithianyl)-1(R)-hydroxymethyl)-5(R)-methyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 153);

6-(2(R)-((2-1,3-Dithianyl)-1(S)-hydroxymethyl)-5(R)-methyl-1-pyrrolidinyl)-4trifluoromethyl-2(1*H*)-quinolinone (Compound 154);

6-(2(R)-Difluoromethyl-5,5-dimethyl-l-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 155);

6-(2(R)-Fluoromethyl-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 156);

6-(2(R)-Hydroxymethyl-5,5-dimethyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 157);

6-(2(R)-(1(R)-Hydroxyethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)quinolinone (Compound 164);

6-(2(R)-(1-Hydroxy-1-methylethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound **165**);

6-(2(R)-(1(S)-Hydroxy-1-cyclopropylmethyl)-5(R)-methyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 166);

6-(2(R)-(1(R)-Hydroxy-1-cyclopropylmethyl)-5(R)-methyl-1-pyrrolidinyl)-4trifluoromethyl-2(1H)-quinolinone (Compound 167);

Applicant: ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US Serial No.: 10/566,569 Response to Notice of Non-Compliant Amendment

Filed : August 21, 2006

6-(2(R)-(1(S)-Hydroxypropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 168),

6-(2(R)-(1(R)-Hydroxypropyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 169);

6-(2(R)-(1(R)-Hydroxypropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 170);

6-(2(R)-(1(S)-Hydroxypropyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 171);

6-(2(R)-(1(R)-Hydroxy-2-methylpropyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoro-methyl-2(1*H*)-quinolinone (Compound**172**);

6-(2(R)-Acetyloxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1<math>H)-quinolinone (Compound 177);

6-(2(R)-Hydroxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound **179**);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1*H*)-quinolinone (Compound**180**);

6-(2(R)-(1(S)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-chlorodifluoromethyl-2(1*H*)-quinolinone (Compound**181**);

6-(2(R)-(1(R)-Hydroxy-2,2,2-trifluoroethyl)-5(R)-methyl-1-pyrrolidinyl)-4-chloro-difluoromethyl-2(1*H*)-quinolinone (Compound**182**);

6-(2(*R*)-(1(*S*)-Hydroxy-2,2,2-trifluoroethyl)-5(*S*)-methyl-1-pyrrolidinyl)-4-chloro-difluoromethyl-2(1*H*)-quinolinone (Compound **183**);

6-(2(R)-Acetyloxymethyl-6(R)-methyl-1-piperidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 186);

6-(2(R)-(2-Hydroxyethyl)-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound 187);

6-(2(R)-(2-Hydroxyethyl)-5(S)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**188**); or

6-(2(R)-Acetyloxyethyl-5(R)-methyl-1-pyrrolidinyl)-4-trifluoromethyl-2(1H)-quinolinone (Compound**189**).

Applicant : ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US Serial No. : 10/566,569 Response to Notice of Non-Compliant Amendment

Filed : August 21, 2006

23. (Previously presented) The pharmaceutical composition of claim 14, wherein the composition is formulated for oral, topical, intravenous, suppository or parenteral administration.

- 24. (Cancelled).
- 25. (Currently amended) A method of modulating treating an individual having a condition responsive to treatment with an androgen receptor agonist, activity in a mammal, comprising administering to the mammal a pharmaceutically effective amount of a compound of claim 1 that is an androgen receptor agonist and thereby treating the condition, wherein the condition is impotence, a wasting disease, hypogonadism, breast cancer, frailty, osteoporosis or cancer cachexia.
- 26. (Currently amended) A method for modulating a process in a mammal mediated by treating an individual having a condition responsive to treatment with an androgen receptor antagonist, comprising administering the mammal a pharmaceutically effective amount of a compound of claim 1 that is an androgen receptor antagonist and thereby treating the condition, wherein the condition is acne, male-pattern baldness, hirsutism, prostatic hyperplasia or prostate cancer.
 - 27. and 28. (Cancelled).
- 29. (Currently amended) The A method of claim 27 providing a therapy to an individual, comprising:

administering to the individual a pharmaceutically effective amount of a compound of claim 1 that is an androgen receptor agonist or partial agonist, wherein the condition is susceptible to treatment with a therapy selected from the group of is male hormone replacement therapy, female androgen replacement therapy and stimulation of hematopoiesis or contraception.

- 30. (Previously presented) The compound of claim 2, wherein the compound is an androgen receptor antagonist.
- 31. (Previously presented) The compound of claim 2, wherein the compound is an androgen receptor agonist.
- 32. (Previously presented) The compound of claim 2, wherein the compound is an androgen receptor partial agonist.

Applicant: ZHI et al. Attorney's Docket No.: 3800024.00350 / 1111US Serial No.: 10/566,569 Response to Notice of Non-Compliant Amendment

Filed : August 21, 2006

33. (Previously presented) The pharmaceutical composition of claim 15, wherein the compound is an androgen receptor modulator.

- 34. (Previously presented) The pharmaceutical composition of claim 33, wherein the compound is an androgen receptor antagonist.
- 35. (Previously presented) The pharmaceutical composition of claim 33, wherein the compound is an androgen receptor agonist.
- 36. (Previously presented) The pharmaceutical composition of claim 33, wherein the compound is an androgen receptor partial agonist.
- 37. (Previously presented) The pharmaceutical composition of claim 16, wherein the compound is an androgen receptor modulator.
- 38. (Previously presented) The pharmaceutical composition of claim 37, wherein the compound is an androgen receptor antagonist.
- 39. (Previously presented) The pharmaceutical composition of claim 37, wherein the compound is an androgen receptor agonist.
- 40. (Previously presented) The pharmaceutical composition of claim 37, wherein the compound is an androgen receptor partial agonist.
- 41. (Previously presented) The pharmaceutical composition of claim 17, wherein the compound is an androgen receptor modulator.
- 42. (Previously presented) The pharmaceutical composition of claim 41, wherein the compound is an androgen receptor antagonist.
- 43. (Previously presented) The pharmaceutical composition of claim 41, wherein the compound is an androgen receptor agonist.
- 44. (Previously presented) The pharmaceutical composition of claim 41, wherein the compound is an androgen receptor partial agonist.
- 45. (Currently amended) A method of treating prostate cancer in a subject, comprising administering to the subject a pharmaceutically effective amount of a compound of claim 1 that is an androgen receptor antagonist.